II. REMARKS

Preliminary Remarks

Upon entry of this amendment, claims 1-24 will be pending of which claims 1, 14, and 16 are independent.

Claims 4-13, 15, and 17-19 were objected to under 37 C.F.R. §1.75(c) as being in improper form. Claims 2-13, 15, and 17-19 are amended to remove multiple dependencies and multiple ranges, which are incorporated in new claims 20-24. Support for the claim amendments and the new claims can be found in the specification and claims as originally filed. The applicants believe that no new matter has been added as a result of these amendments and respectfully request examination of these claims on their merits.

This response is timely filed within the shortened statutory period for response. Thus, the applicants believe that no fee is due. The applicants respectfully request reconsideration and allowance of the present application.

Patentability Remarks

Rejection under 35 U.S.C. §103 –

Claims 1-3, 14, and 16 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Verschueren *et al.* (EP 0 785 088). The applicants respectfully traverse in view of the preceding amendments and succeeding remarks.

The object of Verschueren *et al.* is to provide a solution to the problem of wrinkles formed in dye donor element during printing (see page 2, lines 45-46). Therefore, Verschueren *et al.* are concerned with a dye donor element comprising on a support, a dye donor layer which comprises a dye dispersed in a binder, wherein the dye donor element has particular properties of elongation. Dendrimers may be added to the dye donor layer as a density improving agent or thermal solvent, to improve dye transfer efficiency during printing. In other words, Verschueren *et al.* principally concern themselves with dye donor elements and not the receiver media of the present invention.

Although Verschueren *et al.* include a brief passing reference on page 5, lines 8 to 20 to the possibility of employing dendrimers as plasticizers in the dye image receiving layer of an image receiving element (receiver sheet), there are no specific examples of receiver sheets incorporating dendrimers.

Many imaging systems typically employ receiver media with relatively high Tg polymers, generally having a Tg of at least 60°C. When such polymeric materials are incorporated in receiver media, the receiver media in-use typically suffer from low dye diffusion rates during the printing process, which in turn results in high dye concentrations near the surface of the image and subsequent poor image stability with respect to light and physical contact. In order for the dendrimers to function as plasticizers in a receiving layer of Verschueren *et al.*, the host polymers must have a relatively high Tg for plasticization by the dendrimers to occur.

The present invention appreciates the use of highly branched functionalized polymers, *e.g.*, dendrimers, in a receiver medium (or sheet), which enables dye molecules to be chemically bound to the polymer. It has therefore been surprisingly found by the inventors, that this effect can be exploited in terms of employing host polymer materials of lower Tg, *i.e.*, <50°C, than would normally be used. Therefore, dye molecules can have a significantly increased diffusivity through the coating, prior to interaction with the branched polymers. This results in a more even distribution of dye through the coating than has hitherto been possible, particularly avoiding high concentrations of dye at or near the coating surface.

There is no disclosure in Verschueren *et al.* of a receiver medium bearing a coating comprising a highly branched functionalized polymer of generally globular form, *e.g.*, a dendrimer, dispersed in a host polymer, wherein the host polymer has a Tg of <50°C. The sole example of a receiver sheet exemplified in Example 1 of Verschueren *et al.* does not incorporate a dendrimer and neither does it employ a host polymer having a Tg of <50°C. The receiver sheet described in Verschueren *et al.* instead employs poly(vinyl chloride/co-vinyl acetate/co-vinyl alcohol) (Vinylite VAGD) as the host polymer, which has a Tg of 77°C.

There is therefore no motivation for a person of ordinary skill in the art to modify the receiver sheet disclosed in Verschueren *et al.* There is also no teaching or suggestion in Verschueren *et al.* that the use of highly branched functionalized polymers such as dendrimers in a receiver sheet, enables host polymer materials of lower Tg, and particularly host polymer materials of Tg <50°C, to be employed in a receiver sheet. Further, Verschueren *et al.* do not teach a concomitant advantage of this usage, whereby dye molecules can have significantly increased diffusivity through the coating prior to interaction

with the polymers, resulting in a more even distribution of the dye through the coating than has hitherto been possible.

III. CONCLUSION

In view of the foregoing, the applicants believe that the claims are in form for allowance, and hereby respectfully solicit such action. If any point remains in issue which the examiner feels may be best resolved through a personal or telephone interview, the examiner is strongly urged to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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